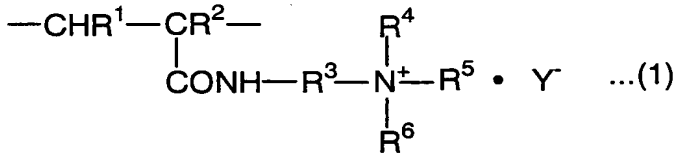
CLAIMS

1. An antistatic film comprising a polyester film and an antistatic coating film on at least one surface of the polyester film, the antistatic coating film comprising a polymer having a polymerized unit represented by the following formula (1):



...(1)

wherein R^1 and R^2 each independently represent a hydrogen atom or a methyl group, R^3 represents an alkylene group having 2 to 10 carbon atoms, R^4 and R^5 each independently represent an alkyl group having 1 to 5 carbon atoms, R^6 represents a hydrogen atom, an alkyl group having 1 to 5 carbon atoms or a hydroxyalkyl group having 2 to 10 carbon atoms, and Y^- represents a halogen ion, a halogenated alkyl ion, a nitrate ion, a sulfate ion, an alkyl sulfate ion, a sulfonate ion or an alkyl sulfonate ion.

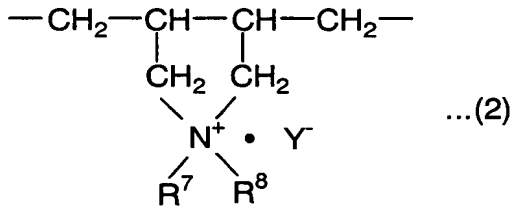
2. The film of claim 1, wherein the antistatic coating film is formed by applying a coating solution comprising the polymer having the polymerized unit represented by the formula (1) on the polyester film and stretching the polyester film having the coating film.

3. The film of claim 1, wherein the polymer further comprises a polymerized unit derived from a reactive acrylic monomer in addition to the polymerized unit represented by the formula (1).

4. The film of claim 1, wherein the reactive acrylic monomer is at least one selected from the group consisting of N-methoxymethyl acrylamide, 2-hydroxyethyl acrylate, 2-hydroxyethyl methacrylate and N-methylol methacrylamide.

5. The film of claim 3, wherein the molar ratio of the polymerized unit represented by the formula (1) to the polymerized unit derived from the reactive acrylic monomer is 50:50 to 95:5.

6. The film of claim 1, wherein the polymer further comprises a polymerized unit represented by the following formula (2):



...(2)

wherein R^7 and R^8 each independently represent a hydrogen atom or an alkyl group having 1 to 5 carbon atoms, and Y^- is the same as defined above, in addition to the polymerized unit represented by the formula (1).

7. The film of claim 6, wherein the molar ratio of the polymerized unit represented by the formula (1) to the polymerized unit represented by the formula (2) is 50:50 to 90:10.

8. The film of claim 1, wherein the polyester film comprises 0.001 to 0.1 wt% of first particles having an average particle diameter of 0.8 to 2.5 μm and 0.1 to 0.8 wt% of second particles having an average

particle diameter of 0.05 to 0.4 μm and has 0 to 5 projections each having a height of 0.58 μm or higher per 10 cm^2 of a surface of the film.

9. The film of claim 8, wherein the first particles and the second particles comprise different chemical species.

10. The film of claim 9, wherein one of the first particles and the second particles comprises an organic material, and the other comprises an inorganic material.

11. The film of claim 9, wherein the first particles and the second particles comprise an inorganic material.

12. The film of claim 9, wherein the antistatic coating film comprises a binder resin in addition to the polymer, the amounts of the polymer and the binder resin are 10 to 90 wt% and 10 to 90 wt%, respectively, based on their total, and the binder resin is at least one selected from the group consisting of a polyester resin and an acrylic resin.

13. The film of claim 12, wherein the antistatic coating film further comprises 1 to 15 parts by weight of surfactant based on 100 parts by weight of the total of the polymer and the binder resin.

14. The film of claim 12, wherein the antistatic coating film further comprises 3 to 25 parts by weight of polymer having an oxazoline group based on 100 parts by weight of the total of the polymer and the binder

resin.

15. The film of claim 14, wherein the polymer having an oxazoline group is water soluble, has a glass transition temperature of 50 to 120°C and has an oxazoline equivalent of 80 to 250 g/equivalent.

16. The film of claim 14, wherein the polymer having an oxazoline group comprises a polymerized unit derived from methyl methacrylate and a polymerized unit derived from methacrylamide as copolymerized units.

17. The film of claim 12, wherein the acrylic resin as the binder resin has a glass transition temperature of -10 to 50°C.

18. The film of claim 1, wherein the polyester film is a single-layer film or a laminated film.

19. The film of claim 18, wherein the laminated film comprises three layers, and the middle layer is formed from a melt of a recovered polyester film.

20. The film of claim 1, wherein the polyester in the polyester film is a polyethylene terephthalate or polyethylene-2,6-naphthalene dicarboxylate.

21. The film of claim 1, having a visible light transmittance of 70% or higher and a haze of 8% or lower.

22. The film of claim 1, wherein the polyester film comprises 5 to 25 wt% of white pigment and has a thickness of 20 to 300 μm.

23. A film for laminating on a liquid crystal polarizing plate, the film comprising the antistatic film of claim 1, an adhesive layer on one surface of the antistatic film, and a temporarily existing layer on the surface of the adhesive layer.

24. The film of claim 23, wherein the temporarily existing layer is a protective film which is removed to laminate the film on a liquid crystal polarizing plate or a removable film which is removed after laminated on a liquid crystal polarizing plate.

25. A film for a label, the film comprising the antistatic film of claim 1 and an ultraviolet curing ink layer or a thermosetting ink layer on the surface of the antistatic coating film of the antistatic film.

26. A film for a magnetic card, the film comprising the antistatic film of claim 1, a magnetic layer on the surface of the antistatic coating film of the antistatic film, and an ultraviolet curing ink layer on the other surface of the antistatic film.